

IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF OKLAHOMA

W. A. DREW EDMONDSON, in his)
capacity as ATTORNEY GENERAL)
OF THE STATE OF OKLAHOMA and)
OKLAHOMA SECRETARY OF THE)
ENVIRONMENT C. MILES TOLBERT,))
in his capacity as the)
TRUSTEE FOR NATURAL RESOURCES))
FOR THE STATE OF OKLAHOMA,)
)
Plaintiff,)
)
vs.) 4:05-CV-00329-TCK-SAJ
)
TYSON FOODS, INC., et al,)
)
Defendants.)

THE VIDEOTAPED DEPOSITION OF
VALERIE HARDWOOD, PhD, produced as a witness on
behalf of the Defendants in the above styled and
numbered cause, taken on the 18th day of July, 2008,
in the City of Tulsa, County of Tulsa, State of
Oklahoma, before me, Lisa A. Steinmeyer, a Certified
Shorthand Reporter, duly certified under and by
virtue of the laws of the State of Oklahoma.

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1 Foods.

2 VIDEOGRAPHER: Thank you. The witness may
3 be sworn in.

4 VALERIE HARWOOD
5 having first been duly sworn to testify the truth,
6 the whole truth and nothing but the truth, testified
7 as follows:

8 DIRECT EXAMINATION

9 BY MR. TODD:

10 Q Good morning, Professor Harwood. How are you? 09:06AM

11 A Fine, thanks.

12 Q Good. Now, this is the third time you've
13 given testimony in this case. You've been deposed
14 previously and you testified at the preliminary
15 injunction hearing. That's right? 09:06AM

16 A That's correct.

17 Q Okay. Just quickly, the same ground rules as
18 we used before. I will attempt to ask clear
19 questions and if you don't understand my question,
20 please let me know so that you're answering the 09:07AM
21 question that I'm asking. Okay?

22 A Okay.

23 Q And remember to give verbal answers so they
24 can be recorded. And I will attempt to use
25 technical terms correctly, but you obviously are 09:07AM

1 epidemiological studies to elevated microbial
2 pollution levels, and I'm just wondering which
3 microbes.

4 A Well, so in this case what this statement was
5 about was about the linkage between high indicator
6 organism levels that indicate fecal pollution and
7 their connection. So not linked to specific
8 disease-causing organisms but to fecal pollution and
9 their indicator, the Enterococci.

10:03AM

10 Q Okay. Have you studied any incidents of AFRI
11 in the IRW?

10:04AM

12 A No.

13 Q Are you familiar with any incidents of it in
14 the IRW?

15 A No.

10:04AM

16 Q Are you familiar with any incidents resulting
17 from exposure to water in the IRW?

18 A No.

19 MR. TODD: We'll go ahead and stop and
20 change the tape.

10:04AM

21 VIDEOGRAPHER: We're now off the Record.
22 The time is 10:04 a.m.

23 (Following a short recess at 10:04
24 a.m., proceedings continued on the Record at 10:19
25 a.m.)

10:19AM

1 A No.

2 Q On Page 4 of your report, you quote the World
3 Health Organization, this little block quote here,
4 and you quote, characterization of illnesses --
5 infections and illnesses due to recreational water
6 contact as being generally mild; do you see that?

10:20AM

7 A Yes.

8 Q What do you take generally mild to mean?

9 A What I just described. So it's not mild to
10 the person, but vomiting and diarrhea for two or
11 three days, again, missing work and school, but then
12 recovering on their own.

10:20AM

13 Q Okay, but seeking medical treatment or not
14 seeking medical treatment?

15 A Frequently not seeking medical treatment.

10:21AM

16 Q Okay. You testified previously that
17 plaintiffs have not undertaken any epidemiological
18 study to quantify disease in the watershed. Is that
19 still the case?

20 A Can you say that again? Sorry.

10:21AM

21 Q You testified I think at your last deposition
22 that -- you were asked whether plaintiffs have taken
23 any study to document levels of disease in the
24 watershed.

25 A Correct.

10:21AM

1 Q And that still has not been done?

2 A Correct, it has not been done.

3 Q So the plaintiffs haven't conducted any

4 epidemiological study to assess levels of

5 Campylobacteriosis or Salmonellosis?

10:21AM

6 A Correct.

7 Q Okay. Have you yourself ever designed an

8 epidemiological study?

9 A I have written a grant for an epidemiological

10 study with the aid of epidemiologists, but myself am

10:21AM

11 not an epidemiologist. So I'm familiar with the

12 methods used, but I would seek help from an

13 epidemiologist when design and study --

14 Q You need to translate your field of jargon for

15 me. You said you wrote a grant. Does that mean you

10:22AM

16 got the grant and did it or proposed a project or --

17 A This particular grant is a proposed project

18 for an Environmental Protection Agency and the

19 Florida Department of Environmental Protection, and

20 the first phase of it is funded but the second

10:22AM

21 epidemiology phase is not yet funded.

22 Q Okay. Now, you note -- this is in Paragraph 9

23 on Page 4 still -- that infants, children, pregnant

24 women, elderly and the immunocompromised are more

25 susceptible to waterborne infections.

10:22AM

1 common that Guillain-Barre.

2 Q Since your last deposition has anyone

3 associated with the State's case studied

4 Guillain-Barre Syndrome in the IRW?

5 A Not to the best of my knowledge.

10:30AM

6 Q Are you familiar -- are you aware of any case

7 of Guillain-Barre Syndrome in the IRW?

8 A No.

9 Q What is Reiter's Syndrome?

10 A It is -- you know, I can't say for sure. I'm

10:30AM

11 sorry.

12 Q So you've never studied it?

13 A No.

14 Q Okay. Have you ever studied Guillain-Barre

15 Syndrome?

10:30AM

16 A Not beyond reading articles, not specifically

17 in my lab.

18 Q What you include in your report about the two

19 syndromes, I take it, is just based on your

20 literature review?

10:30AM

21 A Correct.

22 Q I take it -- are you aware of any case of

23 Reiter's Syndrome in the IRW?

24 A No.

25 Q Are you aware of any case of Reiter's Syndrome

10:30AM